

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Mike.Czuhajewski@bbs.abs.net (Mike Czuhajewski)
Subject: [714] 4040 notes and mods (repost)
Message-ID: <1995Dec01.083125.18263@abs.net>

Here's something I found recently on rec.radio.amateur.homebrew and the author gave me permission to repost it here. He also gave me permission to use this in the Idea Exchange in the QRP Quarterly, so I deleted a minor item for his "protection". It's a useful little tip, not about the rig itself, which he is submitting to QST for possible use in Hints & Kinks, and one of their criteria for acceptance is not being previously published elsewhere. As he told me, he'd rather see it in QST than the QRP Quarterly since Hints & Kinks gives \$20 checks! Having cashed a couple of those checks myself, I understand his position :-)

73 and Queue Our Pea DE WA8MCQ

Msg #9404 Wednesday, November 29, 1995 21:34 GMT
From: tiemann@spot.Colorado.EDU (TIEMANN BRUCE)
Subject: 40-40 mods, notes

(I know this is a bit late, but...)

I've built the 40-40 QRP 40 meter CW transeiver described in the Nov, 1994 QST, and I've made a few mods and measurements that may be of interest to readers of this group. The receive sensitivity has been increased, QSK is approached, the use of a different final amp is described, and the tuning range has been increased. Birdies present within the band serve as convenient frequency markers.

The receive sensitivity of the 40-40 as built was low: My IC-726 with a 6' whip could hear signals that the 40-40 with a full size dipole couldn't. Two mods cured this: increasing C31, and adding a preamp.

With the antenna connected directly to the RF gain pot, R3, sensitivity was better than with the antenna at the intended place (L6/C30), indicating that loss occurred somewhere in the front end. Walking the antenna away from R3 identified C31 as the deafener. Replacing it with a 1000 pF ceramic (it was supposed to be 68 pF) made the thing hear about as well with the antenna connected to antenna port as at R3, indicating there were no more significant front-end losses. This increased coupling did not lead to significantly louder sidetone on transmit; it was still just as much too loud. Increasing the 4.7 megohm TX-audio-shunt resistor interconnecting the drain and source of FET Q1 to 22 meg fixed it.

However, it was still insensitive, so how about a preamp? W1FB's QRP

notebook describes "the preamp that ICOM uses" in it's HF transceivers - and sure enough it's in my IC-726 schematic. (I used MPF102s.) It's two grounded-gate JFETs on opposite sides of coupling transformers, with the drains 22 ohms from the plus rail, and the sources 22 ohms from ground, and both resistors bypassed on the transistor side by .047 uF caps, and it went between C31 and R3. It made the 40-40 *just* able to hear atmospheric noise. It's nice because it's transparent to RF when power isn't applied - you merely give it juice if you want gain. It draws 10 ma - a good candidate for a front panel switch.

I found the hang time for T-R turnaround too long. It's dictated by the 1M resistor and 0.1 uF cap at the gate of FET Q1. A 0.01 for C was fast but gave a loud pop on T-R turnaround; a 0.02 was ideal.

For the final amp I used a 2SC2075, "identical to an MRF476," in place of the called-for 2N3553. (The MRF476 is spec'd for 3 W output at 50 MHz.) With the '2075, my 40-40 maxes out at about 4.5 watts. In contrast to the text "Adjust R2 as needed for 1.5 W key-down power [...] More is *not* better - you'll coax a little more power out at the expense of efficiency!" I found increasing efficiency with greater power, up to 3W, though this probably has more to do with the transistor than with the circuit. I calculated the efficiency by measuring the supply current to the radio, and measured the RF output by.... [potential Hints & Kinks item deleted]. With 15 volts on the rail, here's what I got:

0.05 watts output	80 ma	TX draw	1.2 W	Input	4% eff.
0.5 W	160 ma		2.4 W		21%
1 W	215 ma		3.23 W		31%
2 W	290 ma		4.35 W		46%
3 W	365 ma		5.48 W		55%
4 W	510 ma		7.65 W		52%

So with a 2SC2075, it looks like the highest eff. is at 3W, right at the spec of an MRF476. Note also that though it drops up top, it's still more efficient at 4 W out than at 1.5 W out.

Increasing C9 above 68 pF is mentioned as how to get more than 40 kHz of tuning range. I settled on 270 pF for C9, and a MV1162 varactor - 275 pF nominal - for a tuning range of just over 130 kHz. This much added capacitance required reducing C5-C7 to .002 each, with some small NP0 caps (68 and 12 pF in my case - YMMV) in parallel to put the bottom at 6997 kHz. This is enough spread that a ten-turn pot is called for as the freq. knob, but I'm exploring use of two single turn pots, a "coarse" and a "fine," to spare my precious ten-turn pot from permanent imprisonment.

As promised in the text, there is a HUGE birdie right at 7000 kHz - and it makes an excellent marker! The radio is usable within 2 kHz of this birdie, so it doesn't result in much loss of spectrum, and I chose the bottom of the

tuning range as 6997 to be sure I could tune across it. In addition, I found two other birdies, a weak one at 7077 kHz, and a strong one at 7117 kHz, and these too were suitable markers, also being unobtrusive and stable. (I wouldn't feel so kindly toward them if there were another means for frequency calibration!)

Next I'll make some KK7B direct - conversion transceivers... I suspect they will make an interesting comparison to the 40-40, at least on RX!

Bruce Tiemann, N6URH

--

Mike Czuhajewski, user of the UniBoard System @ abs.net
E-Mail: Mike.Czuhajewski@bbs.abs.net
The WB3FFV Amateur Radio BBS - Located in Baltimore, Maryland USA
Supporting the Amateur Radio Hobby, and TCP/IP InterNetworking

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: NYOUNG@nova.wright.edu
Subject: [756] And it was, like, so easy?
Message-ID: <01HYAUUVBPCY8X12MC@nova.wright.edu>

I have decided, since my wife's voice mail answering prompt is all in upspeak?, that I will now write all my post to this list in upspeak? That way, there will be no difference between a regular, like, question? and a declarative, like, sentence? Really? So, I like sent my request for a number? and I got back a message that said? that I had no right to ask for a number because I had not subbed the list at this address? So just now I got off my butt and sent another request and while I was downstairs? I got my number?

So my number is, like, you know? like, 116? So now I can like put that like number on like my qsl card or something? AND like maybe I can like use it like on a like contest or like something? And pretty soon I'll get like so totally like maxed out that I'll talk like this like all the like time?

Ayyyyyyyyyyyyyyyyyyyyyyyyyyyy! Damn good thing CW doesn't allow people to sound so annoying. I hate upspeak! I absolutely HATE upspeak. And now I'm so conditioned that I've started hitting the interrogoslam key instead of the period key! Argh!

And besides, a three digit number is so cool. Especially when I think of the numerology or something. One-sixteen. One one six. Bir bir alta. Ciento diez-y-seis. Einn hundred seksten. Yu"z on alta. Yeah. I like the sound of that. "Thank you Masked Man. Let me hear it again..."

73 from 116. Like fer sure.

Nils

WB8IJN &c

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: KE3FL@delphi.com

Subject: [730] Battery Ratings

Message-ID: <01HYAIWJWOR69C3B3S@delphi.com>

ALL batteries need to be de-rated when the current is drawn out faster than the rate used to rate the batteries. This is simple chemistry/physics. The battery can not deliver (transport) the charge at full rating fast enough when it is drawn out at a faster rate. How to figure it? I don't know, try it and see is the way I do it. Also, don't worry too much about the 7.5 Ahr battery being rated for 8 hrs & not at 3 amps. How long do you TX for? You will find that the standard TX rating is about 20%. This means that you spend 80% of your time listening, or somply NOT TXing and using current at the 3A rate. I have used a 7.5 Ahr battery with my MFJ-9040 for a full week on vacations trying to make 1 to 3 QSO's an evening, & I like a QSO that lasts a min of 30 min. I estimated I had used the battery for 2.5 to 3.5 hrs, I used that same battery for another few months befor I though it needed charging (can't tell you how often I used it in that time but it was about 2 - 3 times a week.) Also, the 9040 only uses about 1A on TX for 4-5W output. I would expect QRP kits to do as well, the 3-5 AMP range is only for the factory built FANCY high-power rigs when used in QRP mode, or are there other QRP Kits out there that simply aren't as good? (Perhaps you were after SSB QRP rigs?) Anyway, HAM radio is an experimenters paradise, the best advice you'll ever get is simply, TRY IT & SEE, then tell the rest of us about it. That's how we all learn.

good-luck & 73 de KE3FL/Phil
:)

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: burdick@interval.com (Wayne Burdick)

Subject: [766] Cascade, heroics, and Miles (in a car) Per Watt

Message-ID: <v0213050eace560edf18f@[199.170.106.28]>

Folks, I wasn't directly involved with the Cascade, but I regularly talked to those who were, and I didn't need corrective lenses to see that they worked their butts off. Doug Hendricks and Dave Meacham, in particular, both deserve a cape and a big "Q" on their chest as legitimate heroes of the QRP world.

And let us not overlook, in Doug's case, what surely must be a new record in Miles (car) Per Watt, a measure of how miles he burned up between Dos Palos and Silicon Valley for every watt PEP that the Cascade puts out.

Manual, schmanual.

Wayne
N6KR

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Jeff Gold <JMG@tntech.edu>
Subject: [716] Cascade-Manual
Message-ID: <01HYAAVMQA76HTSZVP@tntech.edu>

All,

first I want to emphasize again how much I appreciate the work that Norcal has done to promote QRP. I am one of their biggest fans. I also appreciate and admire the work Doug H. has done and think he is a fairly remarkable dude.

OK, now down to business. I had some time last night and went through ALL the errata sheets. Best I can tell is that the only real problem is that there is MUCH duplication of fixes and not all that many fixes. I believe that Doug H. got most of them in the errata he IMMEDIATELY sent to all kit buyers.

Only points of confusion I still have are:

1) P5 of manual and schematic say R2,11 -> errata says R2,22 *I believe the errata just has a mistake?

2) is C15 replacement supposed to be a 50WVDC or 500WVDC?

3) I remember something about replacing caps with silver mics..

which ones and is it really necessary.

Think since I opened my big mouth, I might be willing to do the following:

If those of you who have built the Cascade and have it running CORRECTLY (receive working, transmit correct power and such) would tell me ONLY the corrections that you did (mods) that are not listed in Doug's Errata.. I can simply take the text of Doug's Errata.. which is posted as part of the large Errata and then just make the FEW additions and I believe it will end up being a simple 3 page document that might help end some confusion.

Once again I really believe that the Norcal and particularly Doug, did a great job with the kits and getting us the manual correction.. the problem appears to be just too much duplication and not enough correlation.

73,72

Jeff, AC4HF

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: hysell@kodak.com (John D. Hysell)
Subject: [717] fear not the CASCADE
Message-ID: <9512011242.AA05058@runner.itc.Kodak.COM>

Here is my humble suggestion for building the CASCADE (it worked for me).

Assemble all the errata that was submitted to the list, and print it out to paper. Cross check to eliminate duplicates, and then cut out each individual section. Tape each cutout to the proper page in the assembly manual, and circle, underline, cross-out as needed to highlight where the error or desired mod should be referenced.

Not only does this keep you on track while you are building, but it insures you can re-trace your steps when you need to repair or make further mods.

In other words:

Ask not for a new manual; create your own...

73 -John

KF2XC

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: RobCap@aol.com
Subject: [755] For Sale: Solar Panel, \$75
Message-ID: <951201172458_122341219@mail06.mail.aol.com>

For Sale: Solar Panel, in handsome atache case. Price is \$75 (firm), which includes UPS ground shipping to your QTH in the continental U.S.

Description: Solar Panel is housed in a handsome beige textured plastic case, with integrated carrying handle and black latches to close the case. Case opens to reveal two panels, one on each side, wired in parallel. The panels are flush mounted within the case, and are held in place with black rubber strips.

Dimensions of the case are: 18.5 inches x 13 inches x 1.75 inches (including handle).

Dimensions of the panel are: 12 inches x 12 inches.

Connection to the array is made via a DC coaxial jack, 5.5 mm by 2.1 mm, built into the plastic case.

Panel voltage is approximately 19-20 volts, and power output is approximately 250 mA into a 12 volt 7 amp-hour gel cell.

Please e-mail directly to me (Robcap@AOL.com), because I am not monitoring the QRP-L at the moment.

73,

Rob, WA3ULH

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: KE3FL@delphi.com
Subject: [726] FOX
Message-ID: <01HYAHHPMI6A9C335Z@delphi.com>

Well, I tried for a bit last night on 7040 & then 7110, or as close to these up/down as my MFJ-9040 would get. Found no FOX at around 01:18-01:30 but did find N8MAT/Ed in Grosse Pointe MI running 120W from a Drake TR 7, I was using the MFJ at 3 watts. We had a nice QSO for abt 30 min when the band dropped out from under us. I still copied him at 339 or lower, just above the noise. He originally gave me 549 & I him 569.

Hope others did better, till the next time 74 de KE3FL/Phil
:)

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Bob_Tellefsen-CNSE97@email.mot.com
Subject: [759] Foxless Tues/Thurs
Message-ID: <M570972.001.xktz0.1.951201232022Z.CC-MAIL*/OU=LMPCC10/OU=ILBB/
PRMD=MOT/ADMD=MOT/C=US/@MHS>

So far, after a month of listening, I have yet to hear the fox. I have heard one station working him, tho.

It's not all lost effort, tho. In the process, I've picked up five new states toward my two-way QRP WAS. My antenna seems to favor the east coast over the midwest. Since I don't have all the east coast states yet, I'm not sure whether to complain about the fox or be happy with the new states.

Keeping my ears up,

BobT N6WG ___/
(o o)
\V/

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Mike Robinson <miker@cc.com>
Subject: [758] getting a number
Message-ID: <9512012310.AA06928@voder.nsc.com>

Apparently, my skim-read mode, first thing in the A.M., allowed me to miss the number lottery.

How does one get a qrp-1 number?

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=====
7.3 de Michael aa0ub | QRP:
miker@cc.com Norcal #857 CQC #180 | "UR HB 5W FB HR 72"
=====
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From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: ae4ic@nr.infi.net (BOB KELLOGG)
Subject: [724] Headphones
Message-ID: <199512011537.KAA08682@moe.infi.net>

Gang,

I got my lite weight headphones from Wal-mart for less than \$10. Don't know the brand, but they have TM-101 on each earpiece. The neat feature is that the wire goes to the left side only. (no split line running a wire to each phone) MUCH easier to get on and off, and the wire doesn't get tangled.

Bob Kellogg, AE4IC

Bob Kellogg, AE4IC

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: JKXM17A@prodigy.com (ALLEN SMITH)

Subject: [708] HW-9 Assembly Manual

Message-ID: <013.05836462.JKXM17A@prodigy.com>

Sorry about this but got to try again, with a different approach. Trying to obtain a copy of the HW-9 step by step assembly manual has proven to be an impossibly tedious task for those who must do the coping of all those pages.

So....is there anyone out there who would like to sell outright the HW-9 assembly manual? If so I ask that you please contact N0ZA, Ross, at the following email address: harrell1@aol.com and state your conditions. I failed to obtain one acting as a middleman with the good folks here on the list. Thanks so much if anyone is able to help him. AA0YU Allen

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: Bing WB2SXN <ADMINH10%CLVM.BITNET@CUNYVM.CUNY.EDU>

Subject: [720] HW8 Handbook

Message-ID: <"omnigate.c.639:01.11.95.13.41.53"@clarkson.edu>

tnx fer all the responses - sold to David Adams - he was #1 - 73 de WB2SXN

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: V\$BCIESLAK@china.qgraph.com

Subject: [734] I am #58

Message-ID: <01HYAJ7F88KI011B7P@hub.qgraph.com>

As of 11:58 CST I became QRP-1 #58.....I wonder if this thin has dupe checking?

Brian AE9K

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: pcalcand@sescva.esc.edu (PETER CALCANDY)
Subject: [762] LIST NUMBER
Message-ID: <95120120172369@sescva.esc.edu>

On December 2 at 0113utc I was awarded qrp-1 number 132. Oh Boy!
Remember the QRP sprint this weekend. Since it is a sprint, I will
only offer a short beer this time. Remember, QSO=SHORT BEER.
QSO=SHORT BEER QSO=SHORT BEER

See y'all
Peter N2KPY
QRP-L official number 132

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: torell@sicom.com (Kent Torell)
Subject: [736] list number
Message-ID: <v02130501ace4f6925c7d@[192.91.202.41]>

Just got #57....72 is just minutes away!

KJ7EY

Kent Torell torell@sicom.com 602-483-2867
SICOM 7585 E. Redfield, #202 Scottsdale, AZ 85260

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: KE3FL@delphi.com
Subject: [725] More help for NE 4040/30meter version
Message-ID: <01HYAH6VD0329C335Z@delphi.com>

First, Thanks to all about the "band changing" for this rig, got some good
info even if the conclusion wasn't as I'd hoped, oh-well, can't have it all
I guess.

So here's my next question: I have put together L1 for the 4040 kit
and on my Beckman LM22A LCR meter it measured 4.0 - 3.7 uH, I figure that's
just fine. However, L4, 4T #22 on FT37-43 (target of 7 uH) I measure only
1.4 uH??? I tried again with 10T and got it up to 5 uH, what gives? Is

the meter that far off or do I have a wrong core? It DID come out of the bag marked #43, I have enough wire to try once more, but what should I do? I will wait until I have some good info on this one, continuing with putting in the other parts.

Tnx & 73 de KE3FL/Phil

:-?

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: Steven Pituch <n2mnn@buttercup.cybernex.net>
Subject: [769] Must Unsubscribe (temporarily)
Message-ID: <199512020243.VAA13948@buttercup.cybernex.net>

Sadly I must unsubscribe because my 7 day trial subscription to my current Internet service is not panning out, and I stopped using my old service yesterday to avoid another monthly charge. The month that I've been with QRP-L has been the biggest morale boost to my QRP and general ham efforts that I have ever experienced. I seem to be the only serious QRP'r in my immediate area, so until I found QRP-L I felt quite alone in this flea powered aspect of our hobby. Hopefully I will be back on line by next Friday with a new service.

Three cheers for QRP, and everyone on this net!

See ya later,

Steve Pituch, N2MNN

Steve Pituch, N2MNN
N2MNN@bc.cybernex.net

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: Brien Pepperdine <pepperb@gov.on.ca>
Subject: [707] NE QRP club
Message-ID: <Pine.OSF.3.90.951130221437.18233B-100000@govonca2.gov.on.ca>

Anyone out there from NE -QRP want to give us all a final dunning message re. the end of the membership year - renewals etc. in order to be sure to get the next exciting issue of 72?

Thanks

Brien
Toronto

pepperb@gov.on.ca

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: burdick@interval.com (Wayne Burdick)
Subject: [767] Need reply from Bay-area recipients of this list
Message-ID: <v0213050face56618285a@[199.170.106.28]>

Gang,

I'd like to compile a list: the subset of QRP-L recipients who consider themselves in or near the San Francisco Bay area. We occasionally need to send messages only to the locals. Please RSVP so I can add you to this list. I'll make it into a nice packed list that we can all use.

Up for discussion first will be the possibility of an *outdoor* NorCal day hike/meeting to take place once a month somewhere in the area. This will be just as casual as the usual NorCal meetings, but the emphasis will be on walking a couple of miles--possibly even uphill!--to operate some QRP.

Field day and the Foothill flea market are out of the picture for months, but that doesn't mean we can't take advantage of what few tolerable days there are to get some fresh air and snatch electromagnetic fields. Let's put the 'P' back into 'QRP'--Portable.

Thanks,
Wayne
N6KR

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: ae4ic@nr.infi.net (BOB KELLOGG)
Subject: [732] New Hams - NorCal
Message-ID: <199512011735.MAA27608@moe.infi.net>

Guys,

After reading Dave's comments about being a new ham, I have to share my story. I got hooked on ham radio in the late 40's. I was a high school kid, and with the help of some Elmers, bought a command set (\$2.00) and converted it for 10 meters. I'll never forget the thrill of hearing california hams

booming in like they were next door! (sun spot cycle high). Unfortunately, the ham club met on the same nite as a high school club and I had to make a choice. My code speed was up to about 12wpm, but I chose the h.s. club, because I knew I had the rest of my life to be a ham.

Soon, the Novice class was introduced, but I was too proud to allow myself to be called a "Novice", so I didn't get my ticket. Then came college, marriage, 4 kids, a busy career, (electronics was a hobby) and finally retirement. I got my tech-plus call, KE4UPV, in late Jan '95 and read about the vanity calls. Hurried to upgrade so I could get a good call like some of my old high school buddies have. Got AE4IC as an extra and decided to keep it.

Early this year N4JE0 told me about NorCal. Joined, read about the Sierra and decided it was ideal for me. Wanted to take it with me to the beach, family vacation. - But, I had missed the window. All kits sold, and Wilderness not ready. Contacted Jim Cates with a sad tale of woe about how badly I wanted to build a Sierra. Wayne Burdick sold me a spare main board, module boards and manual. Jim sold me some parts that he had that would fit Sierra. I scrounged the rest. Building was a nice challenge because some of my parts were different size, etc. My local NTE distributor sold me some wrong transisters, so troubleshooting was a bear, but I was on the air in time for vacation!

Built a 20m vertical just for the occasion. Sat on the beach with my little rig powered by a gel cell. It was great. The first day I worked Estonia 569. Many contacts and more DX. A great time.

Although I have an old Kenwood TS-520 the Sierra is my rig of choice. I'm having a great time with QRP and CW.

The pleasure I get from being a Ham has been multiplied many times by the great guys I've met over the air and thru NorCal. One of my first 30M contacts was Chuck, K5F0. The extras who answered my 5 wpm CQ's, the guys who wrote me letters after a QSO, those who set up schedules with me so I could practice on the air -- I can't name all of the hams who have helped and encouraged me.

It's obvious, too, that this forum is populated with the same kind of people.

Thanks, guys, --sorry for being so long winded!

Bob Kellogg, AE4IC

Bob Kellogg, AE4IC

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: passione.vince@dj.com (Vince Passione)
Subject: [746] New Jersey QRP meeting
Message-ID: <9512012028.AA01429@pluto.dowjawg>

Greetings:

The New Jersey QRP Club will be having its next meeting on Wednesday, December 6th at 6:30 PM.

The meeting will be in the Forrestal Village on Route 1 just north of Princeton, NJ. Look for the food court building, we'll meet at 6:30 inside near the Ben & Jerry's. If you need more detailed directions send me direct e-mail or phone me at 609-520-4803.

This is an informal "show and tell" meeting. Anyone interested in QRP is invited to attend.

73,
Vince WA2ECP
vincep@dj.com

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: jps@kodak.com (John P. Spoonhower)
Subject: [728] new vibroplex racer
Message-ID: <9512011628.AA02078@lumi.Kodak.COM>

Guys, I have looked through the most recent publications looking for the new Vibroplex square base racer the one first announced here on qrp-1. Does anyone have any info on where I can purchase one of these? For what cost? Christmas is fast approaching.....
72, john, kc2du

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: eleon@msu.edu (Dr. Edgar Leon)
Subject: [747] Number
Message-ID: <ace533a00402100413d5@[204.22.210.53]>

Hello There!!!!

What is my number???? I dont think you gave me any.

Edgar WR8Z

Edgar Leon
eleon@msu.edu
Michigan Department of Education
Migrant Education Consultant
(517)373-4582 Fax:(517)373-4589

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: JEVERHART@cayman.vf.mmc.com
Subject: [751] Number
Message-ID: <951201162721.22672e7c@carib.vf.mmc.com>

Gang,

Boy you can sure tell who's not busy. Just look at those low numbers! OK, the first few are "gimmies". But after that are the idle netsurfers :-).

I barely made two digits - #97. Had to attend a "working lunch" that lasted until 3. As if that weren't bad enough, it was offsite!

Now then Chuck, we gonna use them in the fox hunt or what?

72,73,

Joe E., N2CX

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [733] numbers
Message-ID: <Pine.PMDF.3.91.951201124437.543760933A-100000@utkvx.utk.edu>

By about 12:30, the numbers had run about half way to 72 and to 73. Good luck.

-73-
LB, W4RNL

L. B. Cebik, W4RNL	/\	/\	*	/	/	/	(Off) (615) 974-7215
1434 High Mesa Drive	/	\	\	----	/	---	(Hm) (615) 938-6335
Knoxville, Tennessee	/\	\	\	/	/		(FAX) (615) 974-3509
37938-4443 USA	/	\	\				cebik@utkvx.utk.edu
QRP-ARCI 2572	G-QRP	7203	CQC	125	NEQRP	347	NORCAL 1111
QRP-L 37			ARRL-Life		QCWA-Life		MIQRP 1432
							10-10 41159

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
 From: Scott Rosenfeld NF3I <ham@w3eax.umd.edu>
 Subject: [713] OHR Explorer II comes to life!
 Message-ID: <Pine.3.89.9512010919.B581-01000000@w3eax.umd.edu>

Best \$80 I have spent in a long time!

Kit went together without a hitch (about 10 hours of building time), save for a little problem I'm having with the transmit offset frequency. The receiver is quiet & sensitive, and the variable BW seems to work well.

Can't wait to listen to some real signals with it (it was 1 a.m. when I finally fired it up and got it aligned, and 20m was totally dead).
 Hooked it up to my TT 1208 xverter and listened to the W3VD 50.064 beacon for a while...W3VD/APL 39.0N 76.9W BEEEEEEEEEEEEEEEP...

Turns out all the IC sockets were indeed there (one got misplaced). No bad solder joints, no bridges, first thing I've built in a LONG time that pretty much worked as it should've the first time...

Scott Rosenfeld NF3I Burtonsville, MD FM19 QRV 40-10/6/2/440
 ** Yes, you CAN do VHF contests with 25W and omni antennas **
 Still stuck at 138 countries confirmed on HF w/dipoles...

 72 & 73 from lovely suburban DC 301-549-1022 weekends/evenings

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
 From: burdick@interval.com (Wayne Burdick)
 Subject: [763] on 100% PCB test & the new Sierra boards
 Message-ID: <v0213050dace55dd83836@[199.170.106.28]>

Hi all,

After doing several NorCal and Wilderness projects I've learned the hard

way that PCB errors can occur at the manufacturer, no matter how good they are.

For that reason the new Sierra boards are being 100% tested on a bed-of-nails fixture. I highly recommend this be done on all production boards, since it will eliminate what is the cause of about 50% of the in-field failures. [Note recent posting on this topic from Marshall, AA0XI, re: the Explorer II.]

73,
Wayne
N6KR

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Phillip Cuchetti <ab082@leo.nmc.edu>
Subject: [764] qrp #
Message-ID: <Pine.ULT.3.90.951201205818.7900B-100000@leo.nmc.edu>

Got # 106.....had to work today, and was slow at the draw...
but 106 ain't bad...I think I'll keep it....hi
72..Phil KD8UX

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: km@PACT.ORG.PE (Kris Merschrod)
Subject: [711] QRP - Philo. Questions ERP is the way to go!
Message-ID: <m0tLKNG-000q6wC@rcp.net.pe>

Here we go again,

QRP - letter of the law 5w CW; 10w SSB

QRP - Spirit of minimalism, i.e., doing with simple systems to the point of making it hard on your self. Perhaps appeals to the "tight fisted," the masochistic, or Don Quijote types. (In the masochistic case it boils down to throwing the whip out the window and transmitting through it in stead of applying it to your back!)

Thus ERP would be a more uniform standard for reporting your state of minimalism. The categories should probably be on a log scale or in

expected S-units of difference.

A few years ago this was hashed over in MI-QRP pretty well. I even analyzed data from contest results to see if the estimated ERP would be a determining variable in scoring. To save everyone the agony of going through their archives; the best indicator of total score was length of time on the air. Sounds reasonable. After all of that statistical analysis my conclusion was, "I'm sorry that I brought up the subject."

On second thought, ERP still sounds like a good idea. After all, you can faithfully report the extreme to which you've gone minimalist. I always felt that I was not so minimalist when running 600 mW into a 4 element quad with at least a 10 dB gain -- that is 6w ERP (using Belden 9913 too)!

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: "evans ken" <evans.ken@wgs-2.bwi.bls.com>
Subject: [737] QRP-L #
Message-ID: <n1394298015.85716@wgs-2.bwi.bls.com>

AT 1:25PM EST TODAY I GOT # 70. YOU MAY BE TO LATE IF YOU'RE TRYING FOR 72 OR 73.

KEN
KJ4XR

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: ddw2@Lehigh.EDU (Dah-Jyuu D. Wang)
Subject: [744] QRP-L #
Message-ID: <199512011951.0AA40509@ns4-1.CC.Lehigh.EDU>

Well, I missed it by just one number, 8-(.

You have been assigned QRP-L member #71.
Use it only for good, not evil.

72 es gl

dit dit

DJ/n2ykp/3

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: plquick@facstaff.wisc.edu (Paulette Quick, N9OUH)
Subject: [731] QRP-L Member Numbers
Message-ID: <v0211010aace49029ab3f@[144.92.104.146]>

Gang,

I thought I would be sneaky and request an Official QRP-L listmember number before the stated start time of 12:00 pm EST.

Though five minutes before the start time, I was already #6. And there is a "dit dit" at the end of the return message. Hmm, guess we know who set up the program! Thanks Chuck, and how's the snow in Dallas? Wisconsin thought to send down some antenna weather to Southern U.S. hams in case you all wanted to build some pre-holiday dipoles and beams.

If you want to get a number and didn't see the 11/28 message from Jim Eshleman, here's what he said you should do:

To obtain a QRP-L member number, send an e-mail message to listserv@lehigh.edu and in the BODY of the message type this command:

RUN QRP-L X GETNR callsign

Now let's see how many people wait until they think they can get #72.

N9OUH
Paulette Quick
plquick@facstaff.wisc.edu

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: kreinbd@ccgate.dl.nec.com (David Kreinberg)
Subject: [745] Re[2]: SUN SPOTS: THE BEST IS YET TO COME!
Message-ID: <9511018178.AA817853637@smtpgw.ccgate.dl.nec.com>

Chuck:

Thanks for the info. Boy, I'm getting really excited about the things to come in a few years. I haven't worked any European stations yet. I'm very anxious to get into that part world.

72/73 de Dave KK5HA

----- Reply Separator -----

Subject: Re: SUN SPOTS: THE BEST IS YET TO COME!
Author: adams@chuck.dallas.sgi.com (chuck adams) at smtpink-dl
From: qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: kreinbd@ccgate.dl.nec.com (David Kreinberg)
Subject: [718] SUN SPOTS: THE BEST IS YET TO COME!
Message-ID: <9511018178.AA817833660@smtpgw.ccgate.dl.nec.com>

Hello All:

Many thanks to all the nice responses I received about my questions on how great hamming can be during cycle peaks.

For those of you who are relatively new to Amateur Radio (like me) and have only gotten involved since the last spot cycle peak, here is a nut-shell review of some answers I got:

- * During the peak years, 20, 17, 15, 12, 10, and 6 meters are wonderful; contacts will follow the sun's direction (generally).
- * 20 meters is (usually) a 24 hr/day band to somewhere.
- * 10 and 15 are extraordinary amazing: a few watts 'o power and a decent antenna will get you about anywhere in the world!
- * Low bands (160, 80/75, 40) for the most part stay the same as they always do. Maybe a little softer than at spot mins, but still reliable for good, solid Q's.
- * Bottom line: the best in ham radio is yet to come - for those of you having a ball now (at minimum spots), just wait and in a few years it will be tremendously fun!!

For those of you who missed my original posting, my offer still stands about giving us your DX experiences during sun spot peak times. I find it fascinating to read about people's "ham career" highlights and the best propagation they've run in to.

So break out your "mental log books" and tell the gang (especially ham plebes like me) the cool things you were able to do during spot peak times!

Thanks again to those who already posted answers.

72/73 de Dave KK5HA

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Bob_Tellefsen-CNSE97@email.mot.com
Subject: [757] Sunspot Activity at Maxima
Message-ID: <M570944.001.xjp10.1.951201225608Z.CC-MAIL*/OU=LMPCC10/OU=ILBB/PRMD=MOT/ADMD=MOT/C=US/@MHS>

David:

The best sunspot maximum I've experienced was the 1956-1958 period while I was in Alaska as a KL7.

One night I had an hour long rag chew between me in Alaska, a ham in Thule, Greenland, a ham at the WWVH site in Hawaii, and a ham at the South Pole. I doubt I'll ever have that experience again, but it's great to look back on.

Auroral activity is also higher during sunspot maxima. It would cause signals to fade out rather abruptly. When we went outside, we would see these great wagon wheel bursts of aurora streamers, radiating from right overhead. At this point, you turned off the gear and started a good book that would last you about three days.

You have a lot to look forward to. Enjoy.

Bob, N6WG (ex KL7SMC)

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: W3ZIF@aol.com
Subject: [760] THANK YOU VERY MUCH!!
Message-ID: <951201190701_122433823@emout05.mail.aol.com>

Thank you folks for the numerous replies I received regarding my dilemma in not being able to remove the tuning knob from my MFJ-9020.
I received some very good ideas as to how to do it and I will now try to determine which is my best route to alleviate the problem.
Many thanks to you and wishing you a very Merry Christmas and a happy, healthy and prosperous new year.
Best 73
Roy - W3ZIF

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: walworth@ICSI.Net (Bob Walworth)
Subject: [761] thanks
Message-ID: <9512020117.AA10793@ICSI.Net>

Thanks so much to all who responded to my plea re: the HW-8 info.
Twas a super endorsement to the comradery of this group.

CU in the Sprint this Sunday.

73 all

de Bob/AK5B
QRP-L #123
Bob Walworth
AK5B
Spring TX

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: JKXM17A@prodigy.com (ALLEN SMITH)
Subject: [709] The Big Deal?
Message-ID: <013.05836458.JKXM17A@prodigy.com>

WB8ZJL, Paul, writes..."FOX Hunts...What's the big fat deal?"

I dunno, Paul, I can't imagine why you even bothered with that nonchalant stroll to the shack where you bagged the fox on one call and a thank you very much good night, ho humm.

I guess I am not sure if this "in your face" kind of remark is supposed to serve as inspiration to us all or a warning to stop the whining. Maybe

it's supposed to be amusing.

All I can say is yes, with a homebrewed 1.5 watt transceiver and wire antenna laying flat out on the roof at 15 feet, IT IS A BIG DEAL!

So there. With kindest regards, Allen - AA0YU (Grand Junction, CO)

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: "Timothy J. Pettibone" <tpettibo@NMSU.Edu>
Subject: [749] The Gods have smiled upon me!
Message-ID: <Pine.A32.3.91.951201135904.103582B-100000@hector>

I got number 73 and wasn't even trying!

Tim, AB50U

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Raymond.Anderson@Eng.Sun.COM (Ray Anderson)
Subject: [750] the number
Message-ID: <9512012117.AA02341@radium.Eng.Sun.COM>

Got the last 2-digit # ! Ha!!!

Output from stdout:

You have been assigned QRP-L member #99.
Use it only for good, not evil.

72 es gl

dit dit

-Ray WB6TPU

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Nick Franco <kf2ph@bnl.gov>
Subject: [752] The Number

Message-ID: <01BAC00C.BD364160@nickf.rhic.bnl.gov>

Wow, there goin' fast. Post after post about everyone's number.

I thought this thing started at midnight. I figured by this morning the numbers would be in the mid-hundreds. I don't remember when I first tried, but I had a lot of trouble. I changed the platform where I receive my mail so the from address didn't match the listserv record for me. I unsubscribed and subscribed from the new area. Then the RUN command was looking for a password?? - I supplied the password from the new subscription and it didn't like that. Then, finally I just sent the mail the way I did the first time but from the new area with the correct email from address and voila!

Based on this preface - what number do you all think I wound up with?

you got it - 13. Yep - lucky 13. Well I like it just the same. Who knows maybe I'll finally hear that wiley fox. Been gettin' skunked royally lately. Yeah - lucky 13. Fits, don't it. Yep!

Well, I already changed my QSL file and started printing up a few cards to have on hand with the QRP-L number boldly displayed on them. Yeah, I make my own cards from a paintbrush file in the Word Pad from Windows '95. It works just fine. Almost never a hitch (you know what's coming).

Yep - went to print up five sheets of cards (I put 3 on a page). 15 QSL cards - right? uhh-uhh - had a printer jam on the the first sheet after only printing one card on the page. I re-started the printing for the remaining four pages...

Let's see - 4 pages with 3 cards on each page = 12 cards and one card from the first page that was salvagable.... yeah...

Wouldn't you know - 13 cards - Yep - perfect.

72 de # 13
Nick - KF2PH

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: "Paul Weiss" <pweiss@compumedia.com>
Subject: [727] The Power Station #SB752 - Good ?
Message-ID: <m0tLY65-00078CC@compumedia.com>

I have a HW-7 and would like to power it off a battery. I was looking

at The Power Station as a power source not only for the HW-7 but also for my HT when the power goes out or I go camping. I would keep it plugged it all the time and power the HW-7 from it. When I go camping I would like to use a solar panel.

Any suggestions.....Thanx Paul - KC7FYQ

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Mike Rioux <mrioux@ftp.com>
Subject: [739] What's this number stuff?
Message-ID: <MAPI.Id.0016.0072696f757820203443463630304334@MAPI.to.RFC822>

I must of missed the post that described the proceedure for getting a qrp-1 number. Can someone send me the info please. Send direct to me. Tnx.

Mike Rioux, NW1J 508-659-6347
FTP Software, Inc. FAX: 508-659-6112
2 High St. mrioux@ftp.com
No. Andover, MA 01845
Six of One

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: james@research.nj.nec.com (James Bennett)
Subject: [703] Re: Battery ratings
Message-ID: <9512010015.AA08336@shakti.nj.nec.com>

Since I have recently been reading about the care and feeding of gel cell batteries, I will share what I have learned so far. First I highly recomment the book "Handbook of Batteries" by David Linden, published by Mcgraw Hill. It has almost everything you would ever want to know about all types of batteries. As for gell cells, it seems that most of them are rated at a 20 hour rate for the current capacity. However, according to the discharge curves for gell cells, they do not do too badly at higher discharge rates. For example a 5AH cell could deliver 5A/20H or 250mA for 20 hours. At 5A/1H = 5AH it would last approximately 40 minutes.

In the case of pulsed current draw (such as cw transmitting) the cell has rest periods in which it can regain chemical equilibrium. Thus in pulsed service it will approach its full AH capacity. So a rig drawing 3A intermittently should run for several hours on a 7.5AH cell.

So much for the lecture, now to practical experience. I have approximately a dozen gell cells in 6 and 12V and capacity of 1.2- 7AH which I use for powering various radio and lighting equipment. For the new 12V 7Ah cells, I have powered my Yaesu FT301S for 4 or 5 hours of receiving(~600mA) and transmitting (2A) and the batteries were still at ~12V. I have also used them to power a 55W spotlight for >1 hour. One trick with the 12V cells is to float them across the 13.8V output of a DC supply to your rig. The cell will remain charged and can supply extra current if your power supply is of insufficient capacity. If you do this I recommend fuses in the battery and power supply leads(just in case).

James Bennett

Amateur Radio: KA5DVS/2 (yes I am in NJ)

email james@research.nj.nec.com

NEC Research Institute

Princeton, NJ

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: william.redfearn.cmwd101@nt.com

Subject: [701] re: FT 243 Crystal Sockets

Message-ID: <"23430 Thu Nov 30 06:06:02 1995"@nt.com>

I have also made my own FT-243 sockets from large female mox pins (from a Radio Shack connector) and small pieces of plexiglas.

73 - Dave.

=====
Dave Redfearn, Sr RF Systems Engineer NORTEL RTP, NC.
ph.(919) 992-3925 email: william.redfearn.cmwd101@nt.com
qrl? de N4ELM/qrp

All opinions are my own, no one else wants them.

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: Mike Robinson <miker@cc.com>
Subject: [722] re: FT 243 Crystal Sockets
Message-ID: <9512011543.AA17505@voder.nsc.com>

There is a method of holding 243's mentioned
the in the Hints and Kinks book from ARRL.

Get a speaker wire connector from radio shack.
The kind that have spring loaded clips. The
holes are in just the right position for the
243 case.

```
=====
7.3 de Michael aa0ub | QRP:
miker@cc.com Norcal #857 CQC #180 | "UR HB 5W FB HR 72"
=====
```

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: David Speegle <dspeegle@dialin.ind.net>
Subject: [710] Re: HW-9 Assembly Manual
Message-ID: <Pine.SUN.3.91.951201045823.29378C-100000@dialin.ind.net>

Allen: The South Bend hamfest is coming up on Jan 7. If I get to go I
will keep my eyes open for a manual for you. There is a good possibility
that a dealer that was at the Wabash hamfest will be there also. He had
original Heathkit manuals. Dave NE9F

```
=====
| David Speegle Email Alias: David.Speegle@dialin.ind.net
|
|
| 311 S West St.
|
| Argos, IN 46511
| Phone: 219.546.3848 FAX:
=====
```

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: aa7qy@primenet.com (Roger Hightower)
Subject: [700] Re: Logo - decals, patches, etc.
Message-ID: <199512010111.SAA23253@usr1.primenet.com>

At 09:31 PM 11/30/95 -0330, Robert J. Gobrick wrote:

>Roger,

>

>Is this for the QRP-L logo contest winner on the QRP-L WWW Homepage OR is
>this for the QRP Mascot Chickadee Logo??

>

>73/72 Bob V01DRB/WA6ERB

>

Bob,

This is for the QRP-L logo....don't have any artwork on the Chickadee.

73/72 Roger

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995

From: "Robert J. Gobrick" <rgobrick@public.compuserve.com>

Subject: [702] Re: Logo - decals, patches, etc.

Message-ID: <199512010101.VAA11667@public.compuserve.com>

Roger,

Is this for the QRP-L logo contest winner on the QRP-L WWW Homepage OR is
this for the QRP Mascot Chickadee Logo??

73/72 Bob V01DRB/WA6ERB

At 16:20 11/30/95 EST, you wrote:

>I contacted Jim at Old West Graphics and he is sending me the info on
>cost, etc for qrp-l decals, patches, etc. Even T-shirts, maybe.

>

>Any interest out there? e-mail me direct if you would like something
>along that line, so I can get an idea of quantity...then I can work on
>price. I'll plug responses into a database so I know who would like
>what.

>

```
-----
| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRP'er Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@public.compuserve.com                |
|                bgobrick@terra.nl.net.nf.ca                  |
| Compuserve:   70466.1405@compuserve.com                     |
|-----
```

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: "Robert J. Gobrick" <rgobrick@public.compusult.nf.ca>
Subject: [699] Re: MFJ 90xx how are they?
Message-ID: <199512010101.VAA11676@public.compusult.nf.ca>

Brad and QRP-L gang,

Yes you are correct in that the MFJ 90xx is a Rick Littlefield K1BQT design. By the way I consider Rick the QRP Father of the NE-602 QRP Transceiver design. Although there were a number of folks working on the NE-602 it was Rick who wrote numerous articles in the old Ham Radio, CQ and 73 magazine on a miniature transceiver that was (and still is) a marvel of it's time back in the late 80's. I remember when Pete Hoover W6ZH wrote this neat article in CQ showing how he packaged Ricks rig in a tiny 4X4X2 cabinet with keyer, RIT, XIT and the kitchen sink thrown in.

Anyway where was I.. Oh yea, I also think that the commercial incarnation of Rick's design - the MFJ 90xx series of rigs will be one of the all time classic rigs that gets folks into QRP. It is a great rig to help introduce folks to QRP and then the next step is to get them into kit building. You have to remember many folks are scared of building a kit yet they want to try out this QRP thing - why they keep hearing about these fox hunts, QRP afields and QRP-to-the-field events - that has got to interest them. The MFJ 90xx fits the bill to a tee. By the way the design is still a good working one as witnessed by the new NW8020 that Roy W6EMT introduced which is a take off of Rick's design (also I'm sure Dave NN1G and Wayne N6KR have been influenced by Rick's work).

My point is if you know a ham (old timer or newbie) who is interested in QRP and is a little hesitant to build a rig then there is no safer way to get them into it then recommending the MFJ unit. I know in my case the thrill I had in working Egypt on 20 meter cw on my FIRST QRP QSO was a memorable moment (Ok so I was lucky and I just didn't wait for any ole stateside QSO to claim as my FIRST QRP QSO :^).

73/72 Bob V01DRB/WA6ERB

PS And all the standard stuff but I sure wish I had a buck for every product that MFJ has come out with..

At 08:51 11/30/95 EST, you wrote:

>

> Hi all, I was wondering opinions about these rigs.

>I think they are based on a Rick Littlefield design, but not sure.

```
-----
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@public.compusult.nf.ca |
|                bgobrick@terra.nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
|-----
```

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: [738] RE: More help for NE 4040/30meter version
Message-ID: <48840.owen@apollo.eeel.nist.gov>

In message Fri, 1 Dec 1995 11:05:42 EST, KE3FL@delphi.com writes:

>
> So here's my next question: I have put together L1 for the 4040 kit
> and on my Beckman LM22A LCR meter it measured 4.0 - 3.7 uH, I figure
> that's just fine. However, L4, 4T #22 on FT37-43 (target of 7 uH) I
> measure only 1.4 uH??? I tried again with 10T and got it up to 5 uH,
> what gives? Is the meter that far off or do I have a wrong core? It DID
> come out of the bag marked #43, I have enough wire to try once more, but
> what should I do? I will wait until I have some good info on this one,
> continuing with putting in the other parts.
> Tnx & 73 de KE3FL/Phil
> :-?
>

Hi Phil,

I could talk to you tomorrow on 2m but I thought that the list might be interested in this also. According to my calculations using the charts on ferrite toroid cores (from Ocean State Electronics Catalog) to get an inductance of 7 uh with a FT-37 Mix 43 core requires 12.9 turns and with the 10 turns you put on it you should get about 4.3 uh pretty close to what you measured. I believe that the parts list must be wrong if they said 4 turns. However, at what frequency is this coil L4 used? The frequency range for a Mix 43 toroid is .01-1 Mhz. If it is used in the VFO than maybe a Mix 63 (.2-10 mhz) would be better or if used at a higher frequency then a Mix 67 (10-80 Mhz). However you realize that the Mix 43 has the highest permeability (850) with the Mix 63 and 67 both at 40, so more turns would be requited for the same value of inductance. Hope this has helped and maybe when you get the rig up and running we can have a SHORT path qso, all 7 miles of it, Hi. 73 Jim K4CGY

James C. Owen, III

National Institute of Standards & Technology (NIST)
Bldg 225/B360
Gaithersburg, MD 20899
1-301-975-5623

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: GREGOIRE@VALLEY.NET (ERNEST GREGOIRE)
Subject: [721] Re: NE QRP club
Message-ID: <199512011336.IAA03937@dartvax.dartmouth.edu>

>
>Anyone out there from NE -QRP want to give us all a final dunning message
>re. the end of the membership year - renewals etc. in order to be sure to
>get the next exciting issue of 72?
>
>Thanks
>
>Brien
>Toronto
>
>pepperb@gov.on.ca
>

OK Gang, Here it comes,

>The new membership chairman for NE QRP Amateur Radio Club is

William Mc Nally AE1D
7 Blueberry Road
Windham, NH 03087

The above address is for NEW membership applications:

Last Name: First Name:
Call Sign: NE-QRP Number if Renewal
Mailing Address:
Phone Number: License Class: Age:
Former Amateur Call[s]: (Year first licensed)

Indicate whether you're a member in the following organizations:
QRP ARCI __ Michigan QRP ___ G-QRP ___ NorCal QRP ___ Other_____

What QRP awards have you won or achievements have you accomplished?

"Who are you" and what do you like about QRP? (This is important)

Please write a couple of paragraphs about yourself, and we'll pass it along to our Member's News Editor.

Indicate whether you're a member of the ARRL. Yes ____ No ____

Would you like to be an officer/director in the NE-QRP Club? Yes___ No___

Please check the box which interests you most:

Ragchewing ____ DX ____ Contest ____ Traffic ____ Awards ____

Homebrewing ___ VHF/UHF ___ Packet___ CW _____ SSB ___

RTTY ____ ATV ____ Satellite ____ HF ____

Other _____

The first year membership is \$10.00 and renewals are \$7.00 per year. Outside USA please add \$5.00. The club year begins in January, and renewals are from September to December for the following year. Please make you check or money order payable to: QRP Club of New England.

Send new to above address.

RENEWALS to

Bill Studley AA10C
133 Babosic Lake Rd.
Merimack, NH. 03054

[illegible]

Ernie Gregoire
RR 1 Box 221
Canaan, NH. 03741

New England QRP Club, information
available on request by sending me a
S.A.S.E. or via E-mail.

e-mail : GREGOIRE@VALLEY.NET
packet : AA1IK@WA1WOK.FN43FE.NH.USA

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: V\$BCIESLAK@china.qgraph.com
Subject: [753] Re: Numbers
Message-ID: <01HYARRWTMAQ00X20D@hub.qgraph.com>

>>Now then Chuck, we gonna use them in the fox hunt or what?

Now every one send a penny to all the people with numbers lower than them
and collect a peeny from all the people with numbers higher than their's.

How long would it take chuck to buy another RP rig with the earnings ;-)

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: "Robert J. Gobrick" <rgobrick@public.compusult.nf.ca>
Subject: [704] Re: OHR - headphones
Message-ID: <199512010101.VAA11661@public.compusult.nf.ca>

Darrel and QRP Gang,

Just a little follow-up for the "Christmas Stocking Stuffers" - I can also highly recommend the Radio Shack Nova-42 Stereo/Mono headphones (list \$12.99 US) which are very convenient for the latest QRP kits on the market since the earphone cord has a built-in Stereo/mono switch AND volume control (I noticed the latest RS catalog doesn't mention the volume control - anyone know if that feature has been dropped?) And if you only need a mono headset then the good ole Radio Shack 20-210 headset (\$9.99 US) which comes with both 1/4 and 1/8 plug is a very decent communication headset and almost as good as a Kenwood HS-6 headset and a lot cheaper.

Remember only 25 QRP shopping days left...

73/72 Bob VO1DRB/WA6ERB

At 15:49 11/30/95 EST, you wrote:

>Radio Shack has their Nova 44 headphones on sale for \$12.99 right now. They
>have padded earpieces and 1/8" stereo plug. Part number is 33-1120 (I just
>picked up two.)

>

>The stereo to mono 1/8" adapter is part #274-368A for about \$1.99.

>

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|-----|
| Bob Gobrick - VO1DRB/WA6ERB/VE2DRB - Newfoundland, Canada |
| QRP'er Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@public.compuserve.nf.ca |
|                bgobrick@terra.nlnet.nf.ca |
| Compuserve:   70466.1405@compuserve.com |
|-----|
```

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: ruswhite@netwest.com (Russell W. White)
Subject: [705] Re: OHR - headphones
Message-ID: <199512010203.TAA02983@saguaro.netwest.com>

I have a OHR Sprint and from both the instructions, and personal experience you should try to find 8 ohm headphones. The Nova phones might be 8 ohm when stereo but they might go to 16 ohm when in Mono. I first tried the RS mono communications phones (16 ohms) and was really dissapointed with the lack of audio with the radio, I'm talking about low audio with the volume control turned all the way up. I then tried stereo phones with one of those mono adapters which gave me about 4 ohms and a huge increase in volume. I'm not sure what 8 ohm mono phones would sound like but I suspect they would give the best audio.

>Radio Shack has their Nova 44 headphones on sale for \$12.99 right now. They
>have padded earpieces and 1/8" stereo plug. Part number is 33-1120 (I just
>picked up two.)

>

>The stereo to mono 1/8" adapter is part #274-368A for about \$1.99.

>

>They are comfortable and low cost and seem to work fine for the price.

>

>72s

>

>Darrel, WD6BOR

>

>

>

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|-----|
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| Russ White AB7JX (ex WB1GQG) QRP-ARCI NORCAL NEQRP |
| Phoenix AZ |
|-----|
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From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: burdick@interval.com (Wayne Burdick)
Subject: [768] Re: on 100% PCB test & the new Sierra boards
Message-ID: <v02130510ace56a5f2575@[199.170.106.28]>

>Tell us what a bed-of-nails fixture is (if you have time ...)

Ooops, sorry Jack. It's a PC board test fixture that has uses "nails" (contact pins) to make contact with each pad/hole on the board. You use it in conjunction with a computer to verify continuity and circuit isolation. There's usually a \$100 to \$200 tooling charge (or more depending on the complexity of the board). Standard procedure for big-company production boards, but apparently not for most small companies!

If you don't do it, you'll occasionally get PC boards that have hairline, nearly-invisible traces between adjacent circuits.

73,
Wayne

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: "N100Q Tom R. @ MR01 01-Dec-1995 1044" <randolph@est.ENABLE.com>
Subject: [729] re: QRP - Philo. Questions ERP is the way to go!
Message-ID: <9512011624.AA02854@us4rmc.pko.dec.com>

From: US4RMC::"km@pact.org.pe" "MAIL-11 Daemon" 1-DEC-1995 06:34:08.22
To: Multiple recipients of list <qrp-l@lehigh.edu>
CC:
Subj: QRP - Philo. Questions ERP is the way to go!

> QRP - Spirit of minimalism, i.e., doing with simple systems to the
> point of making it hard on your self. Perhaps appeals to the "tight
> fisted," the masochistic, or Don Quijote types.

Well, I originally got interested in QRP as a cheap way to get on HF, and to get my hands dirty in the guts of some radio gear. The only way this

actually saves you any money, though, is by some really hard-core scrounging of every bit of electronic scrap you can get your hands on, and then scratch-building gear with it. If you buy all the parts, you'll spend MORE than a typical kit like a Norcal or an Oak Hills, just because volume means discounts. Also - a single band kit for each of the 9 bands, \$100 each...? Well, I guess if we're not interested in some bands this does save some money.

I don't have any philosophical problem with a Yaecomwood at 5W into a yagi at 75 feet, if you already have all that anyway. The bottom line of the above philosophy, i.e. "spirit of minimalism", is that you don't need to drop megabucks on state of the art stuff to get on the air. Your station should still be the best it can be. See W7ZOI's "integrated contest-grade CW station" in the back of "Solid State Design" for an example of an ultimate QRP transceiver (1W output w/ optional 25W power amp, high dynamic range rcvr with 14 poles of xtal filtering, digital freq display, 100% homebrew). It ain't exactly portable, though.

-Tom R. N100Q randolph@est.enet.dec.com

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: cebik@UTKVX.UTCC.UTK.EDU
Subject: [719] Re: QRP - Philo. Questions ERP is the way to go!
Message-ID: <Pine.PMDF.3.91.951201064237.543720252C-100000@utkvx.utk.edu>

On Fri, 1 Dec 1995, Kris Merschrod wrote:

> QRP - letter of the law 5w CW; 10w SSB

>

> QRP - Spirit of minimalism, i.e., doing with simple systems to the
> point of making it hard on your self.

Kris,

Your concept of minimalism is a very interesting one, and certainly may have a place in the total picture of QRP. QRP, like amateur radio as a whole, is a grand variety of interests, perhaps more intensely held than is true of average ham operators.

Note that you have begun a set of subcategories of QRP commitments:

1. QRP: 5w CW/10w SSB is the basic QRP commitment.
2. QRPP: 1 watt or less; especially apt for those who wish to see just what results can be obtained on the least possible power. Perhaps we should think of additional designators for those committed to using less than 100 mW, 10 mW, 1 mW, etc. However, stringing out Ps will likely be self-defeating.
3. QRPM: QRP minimalism, just as you described it. As an article showed in the last issue of 72, there were losses in your connectors, as well as the 9913, so you were a bit less non-minimal than your estimate.

Some of the 1-transistor, crystal rig interest may fit here.

4. QRPE: QRP efficiency, perhaps along the lines I described in a previous note.

5. QRPB or QRPK: QRP building or kits: I am not certain how to designate this category, but it certainly is a very widespread focus on QRP-L, ranging from the development of new designs to the assembly and proving of new kits.

6. QRPF: QRP field operations, portable, mobile, etc. This category becomes more intense with good weather, but for some even bad weather is a challenge.

7. QRPX: Fox hunting???

This is just a beginning. I have omitted QRP-L from the designator list, since it is already an intense interest of most who will see this note. There may be more categories that describe folks most intense QRP interests. Indeed, one might use a set of designators, ranked from most intense interest to moderate interest. Some operator might be QRPMKF, to indicate his or her interest in minimalism foremost, kits next, and field operations still at the intense level, even if they occasionally go fox hunting, etc.

The first, best use of any list like this is probably self-evaluation: what are my interests as we enter December, 1995. Written into a log, it might be interesting to do the same next year and compare results.

There is one category that is not on the list, because it is one we all should apply to a few of the gang, even though modesty might prevent them from applying it to themselves. QRPS: QRP Service to others in the field. We can all have our candidates, and we should send each an occasional direct message of thanks and appreciation. Their dedication makes it possible for each of us to learn a little more and do a little better, whatever we might use as our own designators.

-73-

LB, W4RNL

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [741] Re: QRP-L Member Numbers
Message-ID: <199512011917.TAA29867@chuck.dallas.sgi.com>

Oh, I didn't set the program up. Jim Eshelman did that.

While I'm at it. I have been so busy that I am so far behind.....

I'm scheduled for 7 places in 4 weeks, but I got it down to 4 places in 4 weeks so that I don't have to be in two places at once.

I'll be in Houston next week and Tulsa the week after. I'm trying to decide on taking a rig or a new kit to build, as I did get the Explorer II for 40M. The kit will probably win.....

I'll post the fox results sometime later today. I'll get the latest and greatest runs into the list.

dit dit to all

--

Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [743] Re: QRP-L Member Numbers
Message-ID: <199512011914.TAA29865@chuck.dallas.sgi.com>

Paulette,

Please no more snow. My antenna is already up, thank you very much. :-)

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: [740] RE: QRP-L number
Message-ID: <50488.owen@apollo.eeel.nist.gov>

Hi Guys,

Guess who got number 72? Just Lucky I guess. Now I have no excuse for not getting on Qrp except I haven't been able to get the Drake T4XC to less than 12 watts. I suppose I'll just have to build something. Maybe if the Gov. goes QRT in two weeks I'll go QRP. 72 & 73 Jim K4CGY #72.

In message Fri, 1 Dec 1995 13:37:56 EST, listserv@lehigh.edu writes:

> Output from stdout:
>
> You have been assigned QRP-L member #72.

> dit dit
>

James C. Owen, III
National Institute of Standards & Technology (NIST)
Bldg 225/B360
Gaithersburg, MD 20899
1-301-975-5623

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: prvalko <prvalko@Oakland.edu>
Subject: [735] Re: RUN QRP-L X GETNR WB8ZJL
Message-ID: <Pine.OSF.3.91.951201130639.5044A-100000@saturn.acs.oakland.edu>

On Fri, 1 Dec 1995 listserv@lehigh.edu wrote:

> Output from stdout:
> You have been assigned QRP-L member #59.
> Use it only for good, not evil.
> 72 es gl
> dit dit

*** C O O L ! ! ! *** After 20 years of QRPing I finally get a five nine!

73! =paul= wb8zjl

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: Bob Patten <z002816b@bcfreenet.seflin.lib.fl.us>
Subject: [723] Re: SUN SPOTS: THE BEST IS YET TO COME!
Message-ID: <Pine.3.89.9512011039.A27844-0100000@bcfreenet.seflin.lib.fl.us>

On Fri, 1 Dec 1995, David Kreinberg wrote:

> So break out your "mental log books" and tell the
> gang (especially ham plebes like me) the cool things
> you were able to do during spot peak times!
>

A couple of QSO's come to mind from 10M, probably a couple of sunspot
cycle peaks back...

I recall working a fellow in South Africa who was using his wooden leg for an antenna. The artificial leg had a steel pin for additional strength. He would remove his leg, set it atop his antenna tuner, and load it up on 10M, CW. I recall having a very solid QSO with him..

Again on 10M CW, I used to keep a sked with a ZS6 named Ossie about once a week. I was chatting with him when my XYL pulled in the driveway, ran in the house to tell me that JFK had just been shot. Perhaps he was the first person outside the US to hear of the assassination??

Yes, 10M is fantastic during a cycle peak. I recall working JA's, ZL's, VK's, etc. while running 5W mobile in my old VW Squareback. Can't wait 'til the band gets out of its present slump! Please, if you hear me during the ARRL 10M contest, give me a call - QSOs will most likely be hard to come by...

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [742] Re: SUN SPOTS: THE BEST IS YET TO COME!
Message-ID: <199512011909.TAA29827@chuck.dallas.sgi.com>

Dave et.al.,

During the three peaks that I've seen you can go a long way with very little power during the peaks.

During the last peak ~1988 or so, running a Uniden 2510 mobile QRP with a mag-mounted center loaded whip on top of a pickup I could work EU es USSR in the morning on the way to work (CW es SSB) and then on the way home from work do SA and Japan with no problems.

Now everyone hold on to your sneakers as this will not happen for another 2 years or so. Now if we get lucky it can happen sooner but the sun takes it's own time about doing these things.....

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: V\$BCIESLAK@china.qgraph.com

Subject: [748] Re: SUN SPOTS: THE BEST IS YET TO COME!
Message-ID: <01HYA0JRHLWY013K5F@hub.qgraph.com>

I took a physics class last year in which we built a radio telescope to observe the sun. We had to do a lot of reading on the Sun to lay the groundwork and found a few interesting facts...one that stood out to me as a ham was the 11 year sunspot cycle is an average....I has been as short as 6 and as long as 18 years. I hope that sunspot drought doesn't happen While I'm around..(but it will right after I build a 10m rig, so I'm holding off for the betterment of hamdom).

You can tell when a new cycle is starting beause sunspots occur in the upper latitude of the sun. as time goes on the form in lower and lower latitudes and become less frequent. It looks like we're on the way up according to observations made last august (see QST) so this was a short one.

Brian AE9K

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: adams@chuck.dallas.sgi.com (chuck adams)
Subject: [765] Re: thanks
Message-ID: <199512020158.BAA00832@chuck.dallas.sgi.com>

For those of you not in the know:

de Bob/AK5B
QRP-L #123
Bob Walworth
AK5B
Spring TX

if I remember correctly from my undergraduate days
I met a kid from Spring TX. I asked him where was
Spring TX? He told me it was 5 miles from Earth.

So Bob, is there an Earth TX? Inquiring minds wanna
know.

dit dit

--

Chuck Adams (K5FO CP-60) adams@sgi.com
Box 181150, Dallas, TX 75218-8150

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995

From: prvalko <prvalko@Oakland.edu>
Subject: [754] Re: The Gods have smiled upon me!
Message-ID: <Pine.OSF.3.91.951201171116.19485A-100000@saturn.acs.oakland.edu>

On Fri, 1 Dec 1995, Timothy J. Pettibone wrote:
> I got number 73 and wasn't even trying!
> Tim, AB50U

Yeah... and he works EVERY fox too.

73 =paul= wb8zjl

qrp-l #59 <===== Ya Gotta Love It!

From qrp-l@lehigh.edu Sat Dec 2 03:07:00 1995
From: "Robert J. Gobrick" <rgobrick@public.compusult.nf.ca>
Subject: [706] Re: Tuesday FOX Results
Message-ID: <199512010101.VAA11670@public.compusult.nf.ca>

Joe and QRP-L Gang,

I noticed Joe was getting desperate for a fox "snag" and he claimed that he can never hear the fox on the East Coast. Then I hear the guys in the West never hear the fox because they claim the foxi only works the East Coast - something strange is going on here.

But I see all this came to pass last night since I saw in Pete WA3NNA's log that Joe was his second QSO - Joe you must have been waiting in the bushes.. Good show since I heard nothing but QRN up here in Newfoundland.

73/72 Bob V01DRB/WA6ERB

PS: Joe are you sure you didn't give Pete a landline since he was only 30 miles away and ask him "Pete that was a 549 you gave me QSL?"....

12:57 11/29/95 EST, you wrote:
>I have tried religiously (well, at least respectfully) for the fox since my
>turn in the barrel quite a while ago..... We'll see how Pete, NNA sounds
tonite. He's about 30 miles away, usually a poor bet on 40 after dark.
>
>72/73,
>
>Joe E., N2CX

| Bob Gobrick - V01DRB/WA6ERB/VE2DRB - Newfoundland, Canada |

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| QRPer Galore - ARCI, GQRP, NORCAL, NEQRP, COQRP, MIQRP, NWQRP |
| Internet:      rgobrick@public.compuserve.com                 |
|                bgobrick@terra.nlnet.nf.ca                    |
| Compuserve:   70466.1405@compuserve.com                       |
|-----|
```

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: JEVERHART@cayman.vf.mmc.com
Subject: [715] Re: Tuesday FOX Results
Message-ID: <951201082636.22672e7c@carib.vf.mmc.com>

Bob, you wrote, in part:

>I noticed Joe was getting desperate for a fox "snag" and he claimed that he
>can never hear the fox on the East Coast. Then I hear the guys in the West
>never hear the fox because they claim the foxi only works the East Coast -
>something strange is going on here.

>PS: Joe are you sure you didn't give Pete a landline since he was only 30
>miles away and ask him "Pete that was a 549 you gave me QSL?"....

Yeah, I am was getting desperate. Fox withdrawal can do strange things. But
then so can a Texas drawl... (sorry, Chuck, bad pun :-)

Of course the westerly folks think that anything east of the rockies is "East
Coast." I personally think the ionosphere goes to the dogs just east of Ohio
and North of Maryland. Perhaps it's the residual effect on the ionosphere from
years of the megawatt 40 meter Radio Moscow inundation. I'm sure glad that
that's now over, but need the charged gases up there to relax into their normal
state and heal themselves.

And, no, I didn't resort to a landline to Pete. Instead I took the QRP
(\$\$-wise) route and snivelled on the Internet, hoping he'd either

a. Take pity on me and give me a contact out of sympathy

or

b. Make sure we contacted early to shut up my griping!

72/73,

Joe E., N2CX

From qrp-1@lehigh.edu Sat Dec 2 03:07:00 1995
From: Jim Eshleman <lujce@hooch.CC.Lehigh.EDU>
Subject: [712] Re: UUENCODED FILES
Message-ID: <95Dec1.095859est.14493-2+43@hooch.CC.Lehigh.EDU>

> Can we exchange UUENCODED files here on the QRP-L list? If not, what
> is the reason? (As much for my further education in this nifty E-mail
> stuff as anything else> ;-)

Bob,

As Rich pointed out, it does create a hardship for subscribers that have to pay for a connection. Also, many of us have quotas (which many of us exceed at times, causing mail to bounce, and causing the list owner to remove us from the list, and causing us to wonder why we're not getting any QRP-L mail :-)) and the reception of large UUENCODED mail files pushes us over the edge.

There are several ways to go here at the moment:

1. You can announce the availability of the file to the list, take requests (privately), and e-mail the file to those that want it.
2. You can ftp the file to ftp.lehigh.edu and put it in the directory /pub/listserv/qrp-1/incoming. YOU WILL NOT BE ABLE TO SEE THE FILE (using "dir") BUT IT IS THERE. You can then advertise the exact file name (ftp is case sensitive) to the list, and people will be able to get it via ftp. YOU WILL NOT BE ABLE TO SEE THE FILE (using "dir") BUT IT IS THERE. You will be able to get it if you use the correct file name. I will probably remove files from this directory after they are several months old.
3. If you think many people will want the file, either ftp it to the incoming directory or e-mail it to me and I'll add it to the archives. If you ftp it to the incoming directory, you'll have to let me know you want it placed in the archives. Note that when you GET a binary file via the list server, it is UUENCODED for you.

If anyone needs more info, check out the "welcome" message that you received when you subscribed. GET QRP-L WELCOME.TXT if you need another copy. If all else fails, e-mail me privately.

73
Jim N3VXI